

(No Model.)

J. WALTER.
SPEAKING TUBE.

No. 405,061.

Patented June 11, 1889.

Fig. 1.

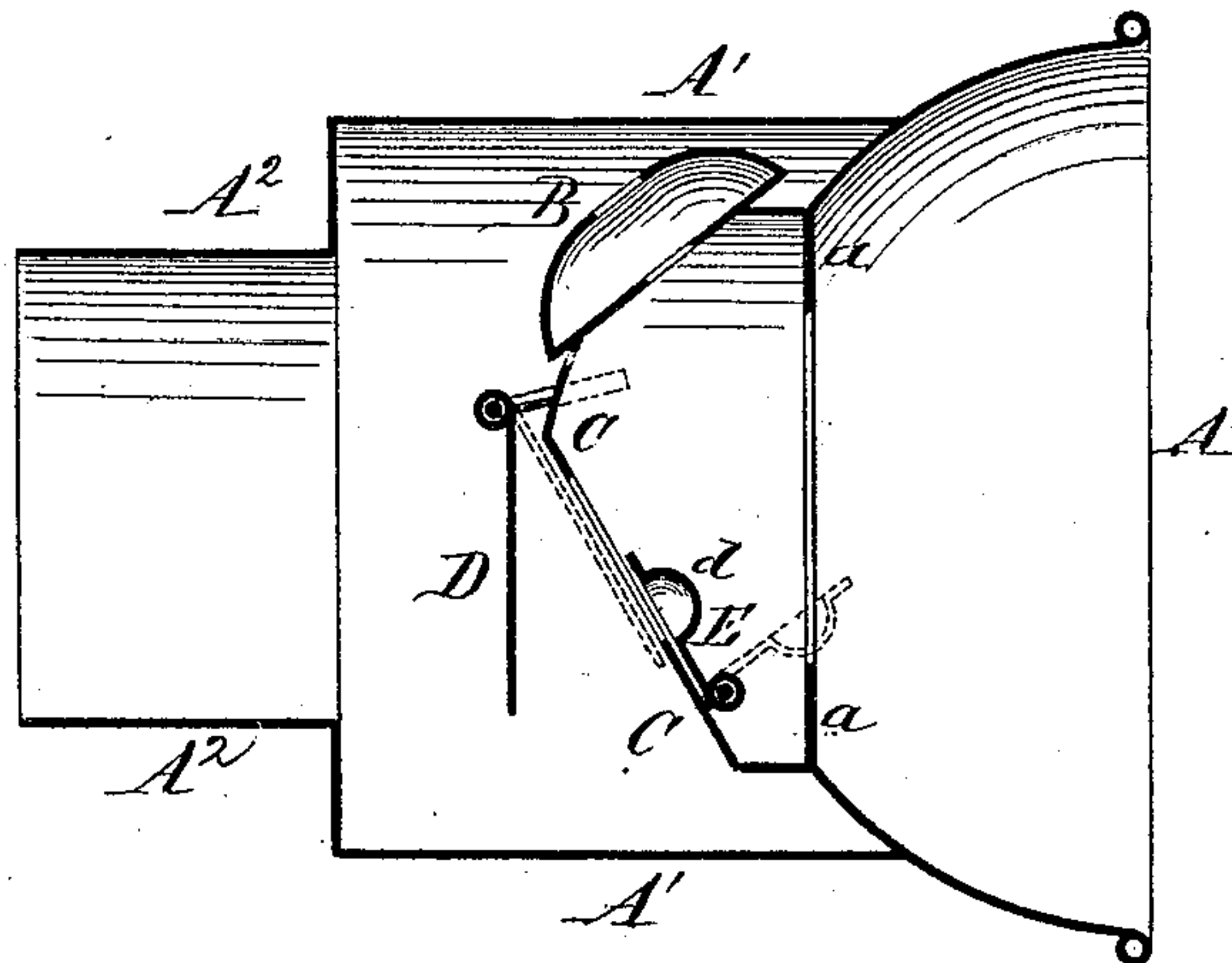
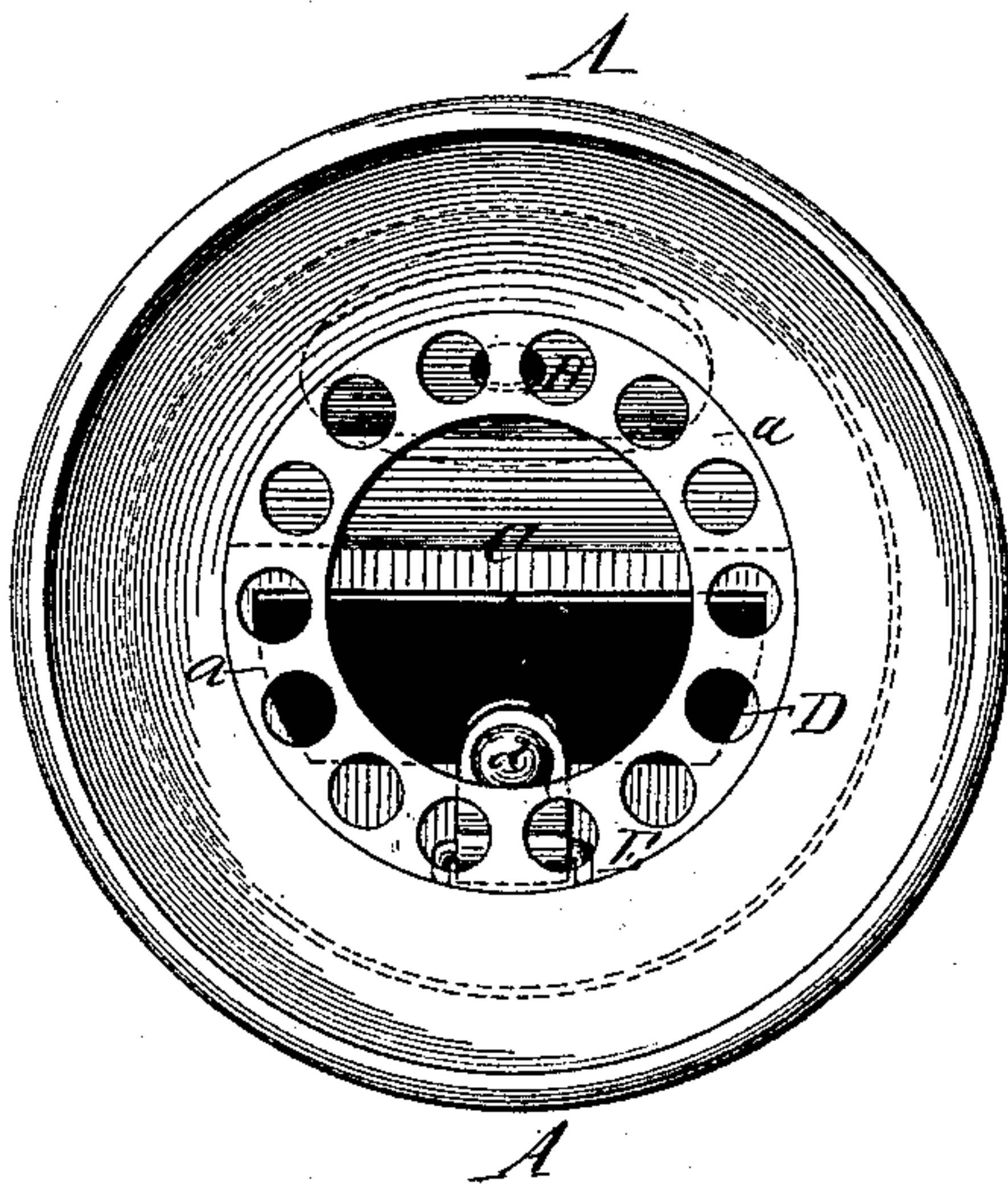


Fig. 2.



WITNESSES:

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SPEAKING-TUBE.

SPECIFICATION forming part of Letters Patent No. 405,061, dated June 11, 1889.

Application filed March 6, 1889. Serial No. 302,156. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WALTER, of the city, county, and State of New York, a citizen of the United States, have invented certain new and useful Improvements in Annunciators for Speaking-Tubes, of which the following is a specification.

This invention relates to an improved annunciator for speaking-tubes, by which a call is readily announced and indicated and the speaking-tube ready for use without requiring the adjustment of the mouth-piece of the tube; and the invention consists of an annunciator for speaking-tubes in which a fixed whistle is located back of the mouth-piece at an inclination to the axis of the speaking-tube, and below the same an inclined plate having an aperture, and back of the same a pendent valve which automatically closes the opening of the inclined plate when a call is made, said valve also setting an indicator that is hinged in front of the inclined and apertured plate, so as to indicate on which tube the call has been made.

In the accompanying drawings, Figure 1 represents a vertical longitudinal section of my improved annunciator for speaking-tubes, and Fig. 2 a front view of the same.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the mouth-piece of a speaking-tube, which is provided with a ring-shaped flange *a* at its inner end, and A' a cylindrical or other casing that is located back of the mouth-piece and made somewhat larger in diameter than the diameter of the speaking-tube A². Back of the flange *a* is arranged in the casing A', at the upper part of the same, an inclined whistle B, which is supported rigidly in the casing A' and made of any approved construction. The whistle B is inclined at an angle of forty-five degrees, or nearly so, to the axis of the casing and mouth-piece. At a similar angle of inclination, but converging toward the whistle B, is arranged a plate C, which is provided with an aperture *b*. Back of the inclined plate C is arranged a pendent valve D, which is hinged to the lower rear part of the whistle B. In its normal position the valve D is sus-

pended vertically back of the aperture *b*, the valve being large enough to close the aperture *b* when it is moved forward against the inclined plate C by a current of air forced through the speaking-tube from the opposite end of the same. In front of the inclined plate C is hinged an indicator E, which is provided with a cup-shaped head *d*, the open side of which faces the aperture *b*, so that when a current of air is sent through the speaking-tube on making a call the air impinges on the valve D, so as to quickly close the same, and on the indicator E, so as to swing the same simultaneously forward until it is arrested by the flange *a* of the mouth-piece A, as shown in Fig. 1. As soon as the valve is closed by the current of air forced through the speaking-tube the air is compelled to pass through the whistle B, which is thereby sounded, so as to announce the call, while the forward position of the indicator E shows on which tube the call has been made. When answering the call, the indicator is forced back into its former position by simply blowing on it, the speaking through the tube being then accomplished in the usual manner without being interfered with by the valve D.

The different parts composing the annunciating mechanism are so disposed in the casing A' as to work automatically without requiring any adjustment by hand, whereby a practical and convenient annunciating mouth-piece for the speaking-tubes is obtained.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the mouth-piece of a speaking-tube, of a casing back of the mouth-piece, a whistle arranged at an angle of inclination at the upper part of the casing, an inclined plate converging toward the whistle and having an aperture arranged at the lower part of the casing, and a pendent valve hinged back of the apertured plate, substantially as set forth.

2. The combination, with the mouth-piece of a speaking-tube, of a casing back of said mouth-piece, an inclined whistle in said casing, an inclined and apertured plate converging toward the whistle, a pendent valve

hinged back of the apertured plate, and an indicator hinged in front of said plate, substantially as set forth.

3. The combination, in a speaking-tube, of
5 a mouth-piece having a ring-shaped flange at its inner end, a casing back of said mouth-piece communicating at the rear end with the speaking-tube, a whistle located in inclined position at the upper part of said casing, an
10 inclined and apertured plate converging toward the whistle, a pendent valve hinged back

of said apertured plate, and an indicator hinged in front of the inclined plate and provided with a cup-shaped upper part, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOSEPH WALTER.

Witnesses:

PAUL GOEPEL,
CARL KARP.